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Indiana Public Retirement System

Judges' Retirement System

Actuarial Valuation as of
June 30, 2015



October 29, 2015

Board of Trustees
Indiana Public Retirement System
1 North Capitol, Suite 001
Indianapolis, IN 46204

Re: Certification of the Actuarial Valuations of the Indiana Public Retirement System as of June 30, 2015

Dear Board of Trustees:

Actuarial valuations are performed annually for the Indiana Public Retirement System ("INPRS") defined benefit pension plans ("Plans"). The results of the June 30, 2015 actuarial valuations for all plans other than the Teachers' Retirement Fund are presented in individual valuation reports pursuant to the engagement letter between INPRS and PricewaterhouseCoopers LLP ("PwC"), originally executed on June 7, 2010, as amended through the date of this report. The reports are intended to provide the Board of Trustees ("Board") with information on the funded status of the Plans, development of the contribution rates, and certain financial statement disclosure information.

Under Indiana statutes, employer contribution rates and amounts, as applicable, are adopted annually for each Plan by the Board. The contributions are actuarially determined based on the funding policy, actuarial assumptions, and actuarial methods adopted by the Board. Contributions determined by the actuarial valuation become effective either twelve or eighteen months after the valuation date, depending on the applicable employer. Therefore, contribution rates and amounts determined by the June 30, 2015 actuarial valuation and adopted by the Board will become effective on either July 1, 2016 or January 1, 2017. If new legislation is enacted between the valuation date and the date the contributions become effective, the Board may adjust the recommended contributions before adopting them, in order to reflect this new legislation. Such adjustments are based on information supplied by the actuary.

Financing Objectives and Funding Policy

In setting contribution levels, the Board's principal objectives have been:

- To set contributions such that the unfunded actuarial accrued liability ("UAAL") will be amortized over a period not greater than 30 years.
- To set contributions such that they remain relatively level over time.

To accomplish this, the Board's funding policy requires that employer contributions be equal to the sum of the employer normal cost (which pays the current year cost of benefits accruing) and an amortization of the UAAL in equal installments.

Progress Toward Realization of Financing Objectives

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a Plan's funded status. In the absence of benefit improvements it should increase over time, until it reaches 100% if contributions equal or exceed the actuarially determined amount. The combined funded ratio for all Plans (excluding the Teachers' Retirement Fund) decreased by 2.7% from the preceding year to 84.3%, primarily due to changes in the actuarial assumptions pursuant to the experience study completed in April 2015, investment returns being less than the 6.75% assumed, and other adverse member experience.

Benefit Provisions

The benefit provisions reflected in the valuation reports are those which were in effect at June 30, 2015, as set forth in the related Indiana statutes. There were no material changes in benefit provisions since the 2014 valuations.

Assets and Member Data

The valuations were based on asset values of the trust funds as of June 30, 2015 and member census data as of June 30, 2014, adjusted for certain activity during fiscal year 2015. All asset information and member data were provided by INPRS. While certain checks for reasonableness were performed, the data was used unaudited. The accuracy of the results presented in the reports is dependent upon the accuracy and completeness of the underlying asset and census information.



Actuarial Assumptions and Methods

The actuarial assumptions used in the June 30, 2015 valuations were adopted by the Board pursuant to the experience studies completed in April 2015, which reflected the experience period from July 1, 2010 through June 30, 2014. The June 30, 2015 valuations incorporate member census data as of June 30, 2014, adjusted for certain activity during fiscal year 2015. Standard actuarial techniques were used to roll forward valuation results over one year.

The actuarial assumptions and methods are summarized in the Actuarial Assumptions and Methods section of each valuation report. We believe the actuarial assumptions and methods are reasonable for the purposes of the valuation reports and comply with the parameters set forth in Statements No. 67 and No. 68 of the Governmental Accounting Standards Board ("GASB"). Different assumptions and methods may be reasonable for other purposes. As such, the results presented in the valuation reports should only be relied upon for the intended purpose.

Certification

We certify that the information presented herein is accurate and fairly portrays the actuarial position of each Plan administered by INPRS (other than the Teachers' Retirement Fund) as of June 30, 2015, based on the underlying census data, asset information and selected assumptions and methods. This information is presented in several schedules and exhibits in this report, including the following:

Financial Section:

- Note 1 - Tables of Plan Membership (Included in the Historical Summary)
- Note 8 - Net Pension Liability and Actuarial Information - Defined Benefit Plans (Included in the Accounting Section)
- Schedule of Changes in Net Pension Liability and Plan Fiduciary Net Position
- Schedule of Contributions (Actuarially Determined Contribution)
- Schedule of Notes to Required Supplementary Information

Actuarial Section:

- Summary of INPRS Funded Status (Included in the Historical Summary)
- Historical Summary of Actuarial Valuation Results by Retirement Plan (Schedule of Funding Progress Included in the Historical Summary)
- Summary of Actuarial Assumptions, Methods and Plan Provisions
- Analysis of Financial Experience (Included in the Unfunded Actuarial Accrued Liability Reconciliation)
- Solvency Test (Included in the Historical Summary)
- Schedule of Active Member Valuation Data
- Schedule of Retirants and Beneficiaries

Statistical Section:

- Membership Data Summary (Included in the Historical Summary)
- Ratio of Active Members to Annuitants (Census Counts Included in the Historical Summary)
- Schedule of Benefit Recipients by Type of Benefit Option
- Schedule of Average Benefit Payments

This report contains certain accounting information required to be included in the System's Comprehensive Annual Financial Report. This information for the system has been prepared in accordance with our understanding of GASB No.67. This report also contains employer accounting information prepared in accordance with our understanding of GASB No. 68.

To the best of our knowledge this actuarial statement is complete and accurate and has been prepared in accordance with generally accepted actuarial principles and practice and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with our understanding of the requirements of Indiana state law. The undersigned actuaries are members of the Society of Actuaries and other professional organizations, including the American Academy of Actuaries, and meet the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States relating to pension plans. There is no relationship between the PwC practitioners involved in this engagement and INPRS that may impair our objectivity.



This document has been prepared pursuant to an engagement letter between INPRS and PwC, and is intended solely for the use and benefits of INPRS and not for reliance by any other person.

Respectfully submitted,

A handwritten signature in black ink that reads "Cindy Fraterrigo".

Ms. Cindy Fraterrigo
Member, American Academy of Actuaries
Fellow of the Society of Actuaries
Enrolled Actuary (No. 14-06229)

A handwritten signature in black ink that reads "Brandon A. Robertson".

Mr. Brandon Robertson
Member, American Academy of Actuaries
Associate of the Society of Actuaries
Enrolled Actuary (No. 14-07568)

The content of this document is limited to the matters specifically addressed herein and does not address any other potential tax consequences, or the potential application of tax penalties, to any matter other than as set forth herein. Our conclusions are not binding upon any taxing authority or the courts and there is no assurance that any relevant taxing authority will not successfully assert a contrary position. In addition, no exceptions (including the reasonable cause exception) are available for any federal or state penalties imposed if any portion of a transaction is determined to lack economic substance or fails to satisfy any similar rule of law, and our advice will not protect you from any such penalties. This document supersedes all prior written or oral advice with respect to the issues addressed in this document and all such prior communications should not be relied upon by any person for any purpose.

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SECTION I - EXECUTIVE SUMMARY

HIGHLIGHTS OF THE ACTUARY'S REPORT

This report presents the results of the actuarial valuation of the Judges' Retirement System ("JRS") and has been prepared to present the current funded status of the Plan, contribution requirements for fiscal year 2017 (July 1, 2016 through June 30, 2017), and certain financial statement disclosure information. The valuation was performed using census data for plan members as of June 30, 2014, adjusted for certain activity during fiscal year 2015, as provided by INPRS and summarized in Section IV, asset information as of June 30, 2015 provided by INPRS, the actuarial assumptions and methods approved by the Board and summarized in Section V, and the plan provisions effective June 30, 2015 summarized in Section VI.

Contribution Rate

JRS is a State appropriated fund. All employer contributions are made by the State of Indiana. The estimated actuarially determined contribution for fiscal 2017 is \$13.3 million, compared to \$16.9 million for fiscal 2016. It is our understanding the State has budgeted contributions of \$16.8 million for fiscal 2017 and \$16.9 million for fiscal 2016.

Members of JRS contribute 6% of their compensation during their first 22 years of membership. If a JRS member terminates employment with less than 8 years of service, the accumulated contributions with interest can be withdrawn as a lump sum or the member may direct the JRS to make a direct rollover of the distribution amount. When a member becomes vested, the member's account balance may not be refunded and is instead combined with the employer contributions in order to fund the member's future retirement annuity benefit.

Funded Status

The funded status of JRS is measured by the funded ratio, which is the ratio of the assets available for benefits to a benefit liability measure for JRS. While there are several such measures that could be appropriately used, the benefit liability measure that ties most closely to INPRS's funding strategy is the Actuarial Accrued Liability ("AAL").

Using the Actuarial Value of Assets ("AVA"), an asset value that smoothes the market gains and losses over four (4) years, the JRS AAL funded ratio increased from 90.3% at June 30, 2014 to 95.4% at June 30, 2015. The increase is due to changes in assumptions pursuant to the experience study completed in April 2015 and salary/cost-of-living increases that were less than assumed, partially offset by losses on other member experience different than assumed.

Investment Experience

For the fiscal year ending June 30, 2015, the INPRS actual time-weighted return net of fees was 0.0%. Based on the value of assets allocated to JRS as of the prior valuation date and contribution and benefit payment activity during the year, the allocation of returns to JRS represent a return of approximately (0.1%) on market value and 5.5% on actuarial value. The return on actuarial value is different due to the smoothing of returns greater or less than expected returns over four years.

Cost-of-Living Adjustment

Benefits for retired members increase automatically based on the annual pay increase granted for the position the member held at the time of retirement. The annual cost-of-living assumption for the valuation is 2.5%, which is the same as the salary increase assumption for active members. There was a 2.20% salary/cost-of-living increase effective July 1, 2015.

SECTION I - EXECUTIVE SUMMARY

HIGHLIGHTS OF THE ACTUARY'S REPORT (CONTINUED)

Changes in Actuarial Assumptions

An assumption study was performed in April of 2015 resulting in an update to the following assumptions:

The **inflation assumption** changed from 3.0% to 2.25% per year.

The **future salary increases assumption** changed from 4.0% to 2.5% per year.

The **cost-of-living increase assumption** decreased from 4.0% to 2.5% per year.

The **mortality assumption** changed from the 2013 IRS Static Mortality projected five (5) years with Scale AA to the RP-2014 (with MP-2014 improvement removed) White Collar mortality tables, with future mortality improvement projected generationally using future mortality improvement inherent in the Social Security Administration's 2014 Trustee report.

The **retirement assumption** changed from an age-based table to an age and service-based table, reflecting higher rates of retirement after 22 years of service.

The **termination assumption** changed from an age-based table to 3% for all members.

The **spouse age difference assumption** changed for male members from an assumed age difference of 4 years to 3 years.

Changes in Plan Provisions

It is our understanding that there were no changes to the Plan that impacted the pension benefits during the fiscal year.

Changes in Actuarial Methods

There were no method changes for the June 30, 2015 valuation.

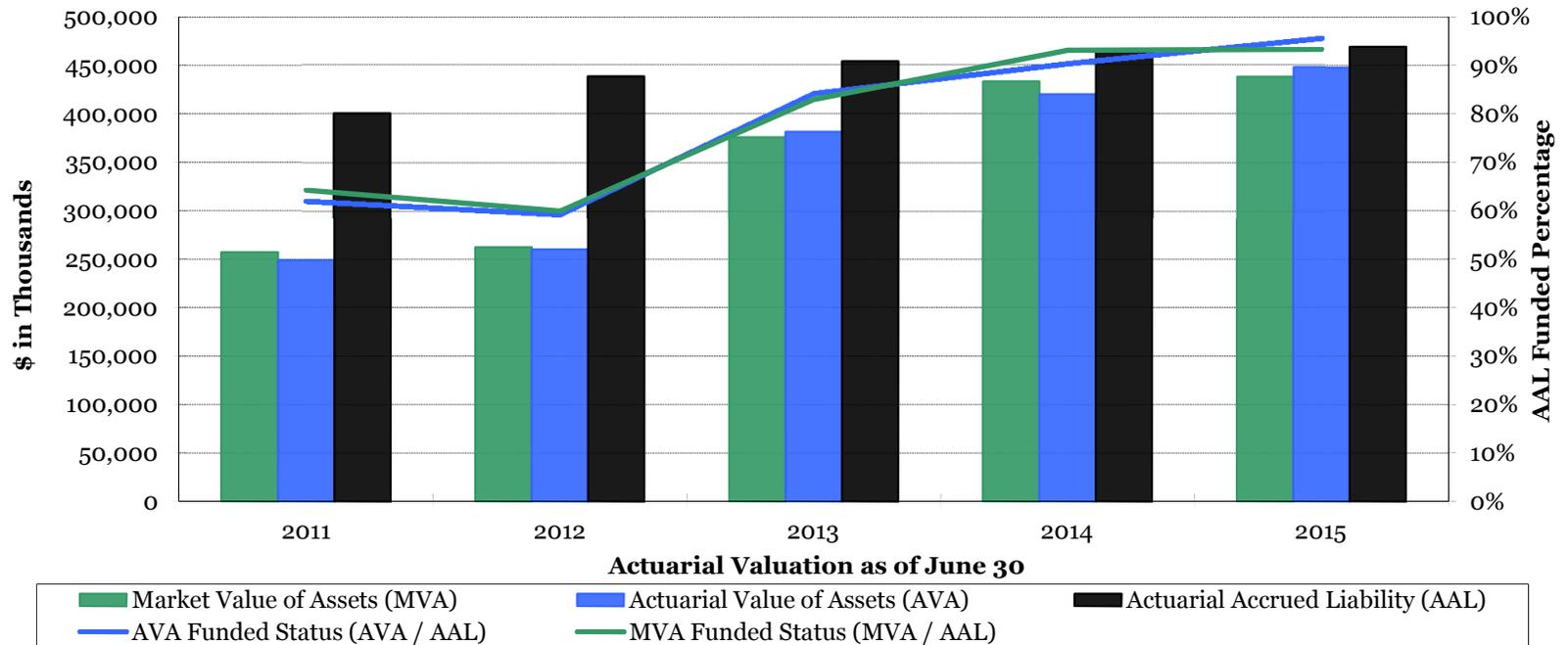
Governmental Accounting Standards

This report contains certain financial statement information, including notes and required supplemental information, prepared in accordance with our understanding of Governmental Accounting Standards No. 67 and No. 68 ("GASB 67" and "GASB 68") to assist INPRS with the implementation of the new standards. GASB 67 is effective for fiscal years beginning after June 15, 2013. GASB 68 is effective for employers sponsoring and/or participating in public pension plans for fiscal years beginning after June 15, 2014.

SECTION I - EXECUTIVE SUMMARY

HISTORICAL SUMMARY

JRS – 5 Year History of Funded Status



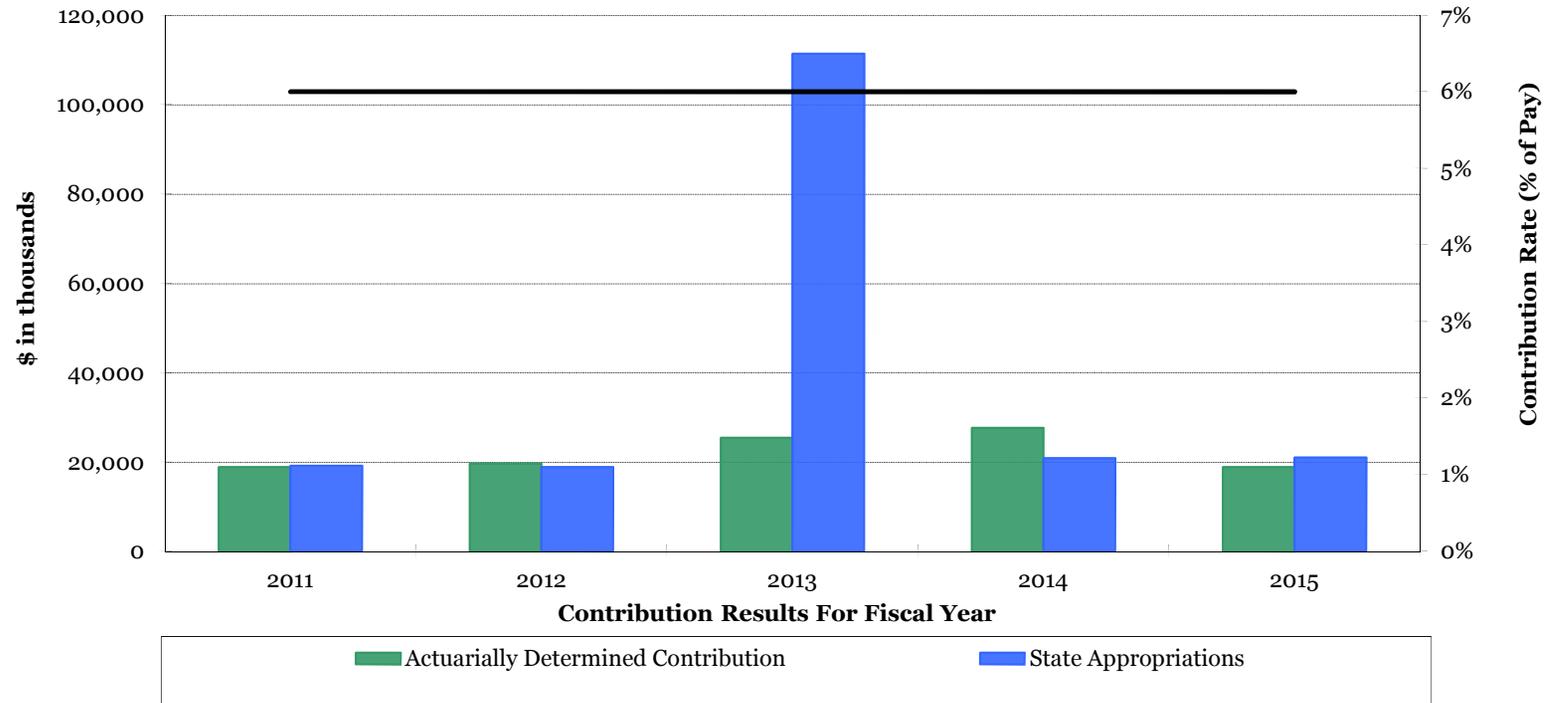
<u>Actuarial Valuation as of June 30:</u>	<u>2011</u>	<u>2012</u>	<u>2013¹</u>	<u>2014</u>	<u>2015</u>
Actuarial Accrued Liability (AAL)	\$400,273.5	\$437,854.5	\$453,109.9	\$464,854.6	\$468,944.8
Actuarial Value of Assets (AVA)	248,623.3	260,096.4	381,239.9	419,567.9	447,514.3
Market Value of Assets (MVA)	256,985.8	262,325.7	375,752.6	432,729.7	437,352.5
Unfunded Liability (AAL - AVA)	151,650.2	177,758.1	71,870.0	45,286.7	21,430.4
AVA Funded Status (AVA / AAL)	62.1%	59.4%	84.1%	90.3%	95.4%
MVA Funded Status (MVA / AAL)	64.2%	59.9%	82.9%	93.1%	93.3%

¹ Includes \$90.2 million of additional contributions due to 2012 HB 1376 during fiscal 2013.

SECTION I - EXECUTIVE SUMMARY

HISTORICAL SUMMARY (CONTINUED)

JRS Fund – 5 Year History of Contributions



Contribution Results For Fiscal Year:

	<u>2011</u>	<u>2012</u>	<u>2013</u> ¹	<u>2014</u>	<u>2015</u>
Actuarially Determined Contribution ²	\$18,909.9	\$19,664.4	\$25,458.5	\$27,647.7	\$18,864.5
State Appropriations	\$19,199.9	\$18,896.2	\$111,417.6	\$20,894.7	\$21,020.0
ADC % Contributed	101.5%	96.1%	437.6%	75.6%	111.4%
Member Contribution Rate ³	6.0%	6.0%	6.0%	6.0%	6.0%

¹ Includes a contribution of \$90.2 million made to the Plan pursuant to 2012 HB 1376.

² The ADC amount is based on the ADC Rate in effect during the fiscal year, multiplied by actual payroll for the fiscal year.

³ Members contribute 6% of pay to the Fund during their first 22 years of service.

SECTION I - EXECUTIVE SUMMARY

HISTORICAL SUMMARY (CONTINUED)

Summary of Valuation Results ¹

<u>Valuation Date</u>	<u>June 30, 2011</u>	<u>June 30, 2012</u>	<u>June 30, 2013</u>	<u>June 30, 2014</u>	<u>June 30, 2015</u>
Development of Actuarially Determined Contribution Amount:					
1. Anticipated Payroll	\$ 45,764,278	\$ 45,138,370	\$ 46,966,598	\$ 47,882,728	\$ 49,650,973
2. Normal Cost (Beginning of Year)					
a. Amount	\$ 15,281,754	\$ 16,084,590	\$ 15,301,638	\$ 15,283,088	\$ 13,869,891
b. Percentage of Payroll	33.39%	35.64%	32.58%	31.91%	27.93%
3. Unfunded Actuarial Accrued Liability Annual Amortizations					
a. Amount	\$ 11,873,696	\$ 13,705,127	\$ 5,656,065	\$ 3,786,771	\$ 2,103,399
b. Percentage of Payroll	25.95%	30.36%	12.04%	7.91%	4.24%
4. Expected Employee Contributions ²					
a. Amount	\$ 2,678,007	\$ 2,684,888	\$ 2,721,671	\$ 2,774,759	\$ 2,972,246
b. Percentage of Payroll	5.85%	5.95%	5.79%	5.79%	5.99%
5. Actuarially Determined Contribution Rate: (2)(b) + (3)(b) - (4)(b)	53.49%	60.05%	38.83%	34.03%	26.18%
6. Estimated Actuarially Determined Contribution Amount					
a. Fiscal Year Beginning	July 1, 2012	July 1, 2013	July 1, 2014	July 1, 2015	July 1, 2016
b. Salary scale	4.00%	4.00%	4.00%	4.00%	2.50%
c. Anticipated Payroll: (1) x [1 + (6)(b)]	\$ 47,594,849	\$ 46,943,905	\$ 48,845,262	\$ 49,798,038	\$ 50,892,247
d. Amount: (5) x (6)(c) ³	\$ 25,458,485	\$ 28,189,815	\$ 18,966,615	\$ 16,946,272	\$ 13,323,590
<u>Fiscal Year</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
State Appropriations ^{4,5}	\$ 111,415,160	\$ 20,894,732	\$ 21,020,000	\$ 16,946,000	\$ 16,823,600

¹ The contribution amounts shown were developed on a funding basis only and do not reflect accounting requirements.

² Only members with less than 22 years of service contribute to the plan. Anticipated payroll for active members with less than 22 years of service as of June 30, 2014 is \$49,537,440.

³ Since the fiscal year to which contributions apply begins one year after the valuation date, the Actuarially Determined Contribution Amount is estimated by assuming payroll will increase by salary scale and then applying the Actuarially Determined Contribution Rate computed at the valuation date.

⁴ JRS is a State appropriated fund. Employer contribution amounts are expected to be paid by the State of Indiana.

⁵ Includes an additional contribution in the amount of \$90,187,160 made to the Plan during fiscal 2013 pursuant to 2012 HB 1376.

SECTION I - EXECUTIVE SUMMARY

HISTORICAL SUMMARY (CONTINUED)

Summary of Valuation Results (Continued) ¹

	<u>June 30, 2011</u>	<u>June 30, 2012</u>	<u>June 30, 2013</u>	<u>June 30, 2014</u>	<u>June 30, 2015</u>
Census Information					
Active					
Number	363	361	365	365	368
Average Age	54.3	54.9	54.6	54.6	54.7
Average Years of Service	8.3	8.9	8.8	8.8	8.8
Anticipated Payroll of Actives ²	\$ 45,764,278	\$ 45,138,370	\$ 46,966,598	\$ 47,882,728	\$ 49,650,973
Inactive - Vested					
Number	66	72	67	67	78
Average Age	61.0	61.1	61.7	61.7	62.4
Average Years of Service	18.1	18.6	18.5	18.5	19.4
Inactive - Non-Vested ³					
Number	31	28	32	32	32
Retiree/Beneficiary/Disabled					
Number	310	311	321	321	326
Average Age	75.1	75.4	75.2	75.2	75.7
Annual Benefits Payable ⁴	\$ 16,787,212	\$ 17,027,599	\$ 18,474,014	\$ 18,474,014	\$ 18,577,771

¹ The valuation results beginning as of June 30, 2014 were calculated using census data as of the prior year end, adjusted for certain activity during the current fiscal year.

² Figures shown are the anticipated pay for the one-year period following the valuation date.

³ As of June 30, 2014, inactive non-vested members entitled to a refund of their member contributions had balances totaling \$600,741.

⁴ Figures shown reflect cost-of-living increases effective July 1 following the date of the census data.

SECTION I - EXECUTIVE SUMMARY

HISTORICAL SUMMARY (CONTINUED)

Summary of Valuation Results (Continued)

	<u>June 30, 2011</u>	<u>June 30, 2012</u>	<u>June 30, 2013</u>	<u>June 30, 2014</u>	<u>June 30, 2015</u>
Actuarial Accrued Liability					
Member Contribution Balance	\$ 24,359,001	\$ 27,699,555	\$ 29,060,096	\$ 32,060,323	\$ 32,382,776
Retiree/Beneficiary/Disabled	198,796,748	205,340,787	224,131,485	216,043,506	210,020,169
Active and Inactive	<u>177,117,795</u>	<u>204,814,117</u>	<u>199,918,312</u>	<u>216,750,744</u>	<u>226,541,806</u>
Total	\$ 400,273,544	\$ 437,854,459	\$ 453,109,893	\$ 464,854,573	\$ 468,944,751
Actuarial Value of Assets (AVA)					
Member Contribution Balance	\$ 24,359,001	\$ 27,699,555	\$ 29,060,096	\$ 32,060,323	\$ 32,382,776
Retiree/Beneficiary/Disabled	198,796,748	205,340,787	224,131,485	216,043,506	210,020,169
Active and Inactive	<u>25,467,608</u>	<u>27,056,065</u>	<u>128,048,344</u>	<u>171,464,084</u>	<u>205,111,360</u>
Total	\$ 248,623,357	\$ 260,096,407	\$ 381,239,925	\$ 419,567,913	\$ 447,514,305
Market Value of Assets (MVA)					
Member Contribution Balance	\$ 24,359,001	\$ 27,699,555	\$ 29,060,096	\$ 32,060,323	\$ 32,382,776
Retiree/Beneficiary/Disabled	198,796,748	205,340,787	224,131,485	216,043,506	210,020,169
Active and Inactive	<u>33,830,004</u>	<u>29,285,340</u>	<u>122,560,981</u>	<u>184,625,900</u>	<u>194,949,553</u>
Total	\$ 256,985,753	\$ 262,325,682	\$ 375,752,562	\$ 432,729,729	\$ 437,352,498
Unfunded Actuarial Accrued Liability: AAL - AVA ¹					
Member Contribution Balance	\$ -	\$ -	\$ -	\$ -	\$ -
Retiree/Beneficiary/Disabled	-	-	-	-	-
Active and Inactive	<u>151,650,187</u>	<u>177,758,052</u>	<u>71,869,968</u>	<u>45,286,660</u>	<u>21,430,446</u>
Total	\$ 151,650,187	\$ 177,758,052	\$ 71,869,968	\$ 45,286,660	\$ 21,430,446
Funded Percentage ¹					
Member Contribution Balance	100.0%	100.0%	100.0%	100.0%	100.0%
Retiree/Beneficiary/Disabled	100.0%	100.0%	100.0%	100.0%	100.0%
Active and Inactive	<u>14.4%</u>	<u>13.2%</u>	<u>64.1%</u>	<u>79.1%</u>	<u>90.5%</u>
Total	62.1%	59.4%	84.1%	90.3%	95.4%
Summary of Assumptions					
Valuation Interest Rate	7.00%	6.75%	6.75%	6.75%	6.75%
Salary Scale	4.0%	4.0%	4.0%	4.0%	2.5%
Cost-of-Living Assumption	4.0%	4.0%	4.0%	4.0%	2.5%

¹ In determining the unfunded actuarial accrued liability and funded percentage, the assets are allocated first to member contribution balances, then to the retiree/beneficiary/disabled liability, and then to the active/inactive liability.

SECTION II - FUNDING

FUNDING

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SECTION II - FUNDING

A. Development of Funded Status

	June 30, 2014	June 30, 2015
1. Actuarial Accrued Liability		
a. Member Contribution Account	\$ 32,060,323	\$ 32,382,776
b. Retirees, Beneficiaries, and Disableds	216,043,506	210,020,169
c. Actives and Inactives	216,750,744	226,541,806
d. Total: (1)(a) + (1)(b) + (1)(c)	\$ 464,854,573	\$ 468,944,751
2. Actuarial Value of Assets ¹		
a. Member Contribution Account	\$ 32,060,323	\$ 32,382,776
b. Retirees, Beneficiaries, and Disableds	216,043,506	210,020,169
c. Actives and Inactives	171,464,084	205,111,360
d. Total: (2)(a) + (2)(b) + (2)(c)	\$ 419,567,913	\$ 447,514,305
3. Unfunded Actuarial Accrued Liability ¹		
a. Member Contribution Account: (1)(a) - (2)(a)	\$ -	\$ -
b. Retirees, Beneficiaries, and Disableds: (1)(b) - (2)(b)	-	-
c. Actives and Inactives: (1)(c) - (2)(c)	45,286,660	21,430,446
d. Total: (1)(d) - (2)(d)	\$ 45,286,660	\$ 21,430,446
4. Funded Percentage ¹		
a. Member Contribution Account: (2)(a) / (1)(a)	100.0%	100.0%
b. Retirees, Beneficiaries, and Disableds: (2)(b) / (1)(b)	100.0%	100.0%
c. Actives and Inactives: (2)(c) / (1)(c)	79.1%	90.5%
d. Total: (2)(d) / (1)(d)	90.3%	95.4%

¹ In determining the unfunded actuarial accrued liability and funded percentage, the assets are allocated first to member contribution balances, then to the retiree/beneficiary/disabled liability, and then to the active/inactive liability.

SECTION II - FUNDING

B. Unfunded Actuarial Accrued Liability Reconciliation

	June 30, 2014	June 30, 2015
1. Unfunded Actuarial Accrued Liability, Prior Year	\$ 71,869,968	\$ 45,286,660
2. Unfunded Actuarial Accrued Liability (Gain) / Loss		
a. Actuarial Value of Assets Experience	\$ (9,370,863)	\$ 643,870
b. Actuarial Accrued Liability Experience	-	16,065,800
c. Additional Liability Due to Salary / Cost-of-Living Adjustments	(16,025,822) ¹	(7,655,050) ²
d. Additional Liability Due to Changes in Actuarial Assumptions	-	(31,925,306) ³
e. Additional Liability Due to Changes in Plan Provisions	-	-
f. Total New Amortization Bases:	\$ (25,396,685)	\$ (22,870,686)
(2)(a) + (2)(b) + (2)(c) + (2)(d) + (2)(e)		
g. Reduction in UAAL Due to Prior Year Contributions, Net of Interest	(1,186,623)	(985,528)
h. Change in Unfunded Actuarial Accrued Liability:	\$ (26,583,308)	\$ (23,856,214)
(2)(f) + (2)(g)		
3. Unfunded Actuarial Accrued Liability, Current Year: (1) + (2)(h)	\$ 45,286,660	\$ 21,430,446

¹ Salary/Cost-of-Living Adjustment (COLA) of 0% was effective July 1, 2014 rather than the assumed increase of 4.0%.

² Salary/Cost-of-Living Adjustment (COLA) of 2.2% was effective July 1, 2015 rather than the assumed increase of 4.0%.

³ The mortality, retirement, termination, dependent, salary scale and cost-of-living adjustment assumptions were updated pursuant to an experience study completed in April 2015.

SECTION II - FUNDING

C. Actuarial Accrued Liability Reconciliation

1. June 30, 2014 Actuarial Accrued Liability	\$	464,854,573	
2. Normal Cost		15,283,088	
3. Actual Benefit Payments ¹		19,431,822	
4. Employer Service Purchases		-	
5. Interest of 6.75% on (1) + (2) - (3)/2 + (4)/2		<u>31,753,468</u>	
6. Expected June 30, 2015 Actuarial Accrued Liability	\$	492,459,307	
(1) + (2) - (3) + (4) + (5)			
		<u>Dollar Change</u>	<u>Percent Change</u>
		<u>in Liability</u>	<u>in Liability</u>
7. (Gain)/Loss Components			
a. Census	\$	16,065,800	3.3%
b. Salary/Cost-of-Living Adjustment ²		(7,655,050)	(1.6%)
c. Assumption Changes		(31,925,306)	(6.5%)
d. Plan Changes		-	0.0%
e. Total: (7)(a) + (7)(b) + (7)(c) + (7)(d)	\$	<u>(23,514,556)</u>	<u>(4.8%)</u>
8. Actual June 30, 2015 Actuarial Accrued Liability: (6) + (7)(e)	\$	468,944,751	

¹ Includes refunds of accumulated member contributions and net interfund transfers.

² Salary/Cost-of-Living Adjustment (COLA) of 2.2% was effective as of July 1, 2015, rather than the assumed increase of 4.0%.

SECTION II - FUNDING

D. Reconciliation of Market Value of Assets

	June 30, 2014	June 30, 2015
1. Market Value of Assets, Prior June 30	\$ 375,752,562	\$ 432,729,729
2. Receipts		
a. Employer Contributions	\$ 20,894,700	\$ 21,020,000
b. Member Contributions	2,855,956	3,292,222
c. Investment Income and Dividends Net of Fees	51,829,063	(163,721)
d. Security Lending Income Net of Fees	61,119	61,790
e. Member Reassignments	4,050	-
f. Miscellaneous Income	6,053	8,525
g. Total Receipts: (2)(a) + (2)(b) + (2)(c) + (2)(d) + (2)(e) + (2)(f)	\$ 75,650,941	\$ 24,218,816
3. Disbursements		
a. Benefits Paid During the Year	\$ 18,527,788	\$ 19,421,048
b. Refund of Contributions and Interest	-	10,774
c. Administrative and Project Expenses	145,986	164,225
d. Member Reassignments	-	-
e. Miscellaneous Disbursements	-	-
f. Total Disbursements: (3)(a) + (3)(b) + (3)(c) + (3)(d) + (3)(e)	\$ 18,673,774	\$ 19,596,047
4. Market Value of Assets, Current June 30: (1) + (2)(g) - (3)(f)	\$ 432,729,729	\$ 437,352,498
5. Market Value of Assets Approximate Annual Rate of Return ¹	13.7%	(0.1%)

¹ Based on individual fund experience. Net of expenses and assuming cash flows occur at mid-year.

SECTION II - FUNDING

E. Reconciliation of Actuarial Value of Assets

1.	Market Value of Assets, June 30, 2014		\$	432,729,729
2.	Market Value of Assets, June 30, 2015			437,352,498
3.	Expected Earnings/Expenses			
a.	Expected Investment Earnings at 6.75% on June 30, 2014 Market Value			29,209,257
b.	Receipts with Expected Investment Earnings at 6.75% ¹			25,141,572
c.	Disbursements with Expected Investment Earnings at 6.75% ¹			20,087,646
				20,087,646
4.	Expected Assets, June 30, 2015: (1) + (3)(a) + (3)(b) - (3)(c)		\$	466,992,912
5.	2014-2015 Gain/(Loss): (2) - (4)			(29,640,414)
6.	Smoothing of Gain/(Loss)			
	<u>Year</u>	<u>Gain/(Loss)</u>	<u>% Unrecognized</u>	
a.	2014-2015	\$ (29,640,414)	75%	(22,230,311)
b.	2013-2014	\$ 26,204,285	50%	13,102,143
c.	2012-2013	\$ (4,134,555)	25%	(1,033,639)
7.	Preliminary Actuarial Value of Assets, June 30, 2015: (2) - (6)(a) - (6)(b) - (6)(c)		\$	447,514,305
8.	Corridor			
a.	120% of Market Value: 1.2 x (2)			524,822,998
b.	80% of Market Value: 0.8 x (2)			349,881,998
9.	Actuarial Value of Assets, June 30, 2015: (7), but not greater than (8)(a) or less than (8)(b)		\$	447,514,305
10.	Actuarial Value of Assets as a Percent of Market Value: (9) / (2)			102.3%
11.	Actuarial Value of Assets Approximate Annual Rate of Investment Return ¹			5.5%

¹ Assumes cash flows occur at mid-year.

SECTION II - FUNDING

F. Contributions

	June 30, 2014	June 30, 2015
Development of Actuarially Determined Contribution:		
1. Anticipated Payroll	\$ 47,882,728	\$ 49,650,973
2. Normal Cost (Beginning of Year)		
a. Amount	\$ 15,283,088	\$ 13,869,891
b. Percentage of Payroll	31.91%	27.93%
3. Unfunded Actuarial Accrued Liability (UAAL) Annual Amortizations		
a. Amount	\$ 3,786,771	\$ 2,103,399
b. Percentage of Payroll	7.91%	4.24%
4. Expected Employee Contributions ¹		
a. Amount	\$ 2,774,759	\$ 2,972,246
b. Percentage of Payroll	5.79%	5.99%
5. Actuarially Determined Contribution Rate: (2)(b) + (3)(b) - (4)(b)	34.03%	26.18%
6. Estimated Actuarially Determined Contribution Amount		
a. Fiscal Year Beginning	July 1, 2015	July 1, 2016
b. Salary Scale	4.0%	2.5%
c. Anticipated Payroll: (1) x [1+(6)(b)]	\$ 49,798,038	\$ 50,892,247
d. Amount: (5) x (6)(c) ²	\$ 16,946,272	\$ 13,323,590
7. Approved Funding Amount: ³	\$ 16,946,000	\$ 16,823,600
Expected Percentage of Actuarially Determined Contribution Contributed: (7) / (6)(d)	100.00%	126.27%

¹ Only members with less than 22 years of service contribute to the plan. Anticipated payroll for active members with less than 22 years of service as of June 30, 2014 is \$49,537,440.

² Since the fiscal year to which contributions apply begins one year after the valuation date, the Actuarially Determined Contribution Amount is estimated by assuming payroll increases with salary scale and then applying the Actuarially Determined Contribution Rate computed at the valuation date.

³ JRS is a State appropriated fund. Employer contribution amounts are expected to be paid by the State of Indiana.

SECTION II - FUNDING

G. Unfunded Actuarial Accrued Liability Amortization Schedule ¹

	Date Base Established	Reason	Remaining Unfunded	Remaining Period	Amortization Amount
1.	6/30/2009	Actuarial Experience	\$ 36,283,150	21	\$ 3,074,056
2.	6/30/2010	Actuarial Experience and Changes in Actuarial Assumptions	14,191,573	25	1,115,211
3.	6/30/2011	Actuarial Experience and Changes in Actuarial Assumptions	13,462,253	26	1,041,905
4.	6/30/2012	Actuarial Experience and Changes in Actuarial Assumptions	12,301,554	27	938,777
5.	6/30/2013	Actuarial Experience and Changes in Actuarial Assumptions	(6,821,909)	28	(513,883)
6.	6/30/2014	Actuarial Experience	(25,115,489)	29	(1,869,295)
7.	6/30/2015	Actuarial Experience and Changes in Actuarial Assumptions	<u>(22,870,686)</u>	30	<u>(1,683,372)</u>
	Total		\$ 21,430,446	12.3	\$ 2,103,399 ²

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary.

² The weighted average remaining UAAL amortization period is calculated by weighting the remaining amortization period of each base by the amortization amount of each base.

SECTION II - FUNDING

H. Approximate Annual Rate of Return for Year Ending June 30, 2015 ¹

	<u>Market Value of Assets</u>	<u>Actuarial Value of Assets</u>
1. Balance, beginning of year	\$ 432,729,729	\$ 419,567,913
2. Balance, end of year	437,352,498	447,514,305
3. Total increase: (2) - (1)	4,622,769	27,946,392
4. Contributions	24,320,747	24,320,747
5. Benefit payments ²	19,431,822	19,431,822
6. Net additions: (4) - (5)	4,888,925	4,888,925
7. Net investment increase: (3) - (6)	(266,156)	23,057,467
8. Average assets: [(1) + (2) - (7)] / 2	435,174,192	422,012,376
9. Approximate rate of return: (7) / (8) ¹	(0.1%)	5.5%

I. Historical Investment Experience

<u>Year Ending June 30</u>	<u>Actual Rate of Investment Return</u>		<u>Actuarial Assumed Interest Rate</u>
	<u>Market Basis ³</u>	<u>Actuarial Basis ¹</u>	
2006	10.7%	15.1%	7.25%
2007	18.2%	15.8%	7.25%
2008	(7.6%)	8.3%	7.25%
2009	(20.6%)	(1.0%)	7.25%
2010	13.9%	(1.7%)	7.25%
2011	20.1%	(0.6%)	7.0%
2012	0.7%	2.6%	7.0%
2013	6.0%	8.0%	6.75%
2014	13.7%	8.6%	6.75%
2015	0.0%	5.5%	6.75%

¹ Based on individual fund experience. Net of expenses and assuming cash flows occur at mid-year.

² Includes refunds of accumulated member contributions and net interfund transfers.

³ INPRS actual time-weighted rate of return net of fees for 2012-2015. PERF Consolidated Defined Benefit time-weighted rate of return reported as gross of fees for 2006-2011.

SECTION II - FUNDING

K. Interest Rate Sensitivity

The investment return assumption (discount rate) should be based on an estimated long-term investment yield for the plan, with consideration given to the nature and mix of current and expected plan investments. Management and the Board continually monitor the investment rate of return assumption and the Board formally reviews the assumption and makes changes as appropriate. The Board last changed the assumption for the June 30, 2012 valuation from 7.0% to 6.75%.

To illustrate the importance of the investment rate of return, which is used to discount the actuarial liabilities of the Plan, the Funded Ratio and Actuarially Determined Contribution Rate (for the fiscal year beginning July 1, 2016) are shown below and on the following page at interest rates from 5.75% to 8.00%, in 0.25% increments.

	1.00% Decrease: (5.75%)	0.75% Decrease: (6.00%)	0.50% Decrease: (6.25%)	0.25% Decrease: (6.50%)	Current Assumption: (6.75%)
<u>Funded Status</u>					
Actuarial Accrued Liability	\$ 523,671,763	\$ 509,050,181	\$ 495,078,924	\$ 481,721,748	\$ 468,944,751
Actuarial Value of Assets	<u>447,514,305</u>	<u>447,514,305</u>	<u>447,514,305</u>	<u>447,514,305</u>	<u>447,514,305</u>
Unfunded Actuarial Accrued Liability	\$ 76,157,458	\$ 61,535,876	\$ 47,564,619	\$ 34,207,443	\$ 21,430,446
Funded Ratio	85.5%	87.9%	90.4%	92.9%	95.4%
<u>Actuarially Determined Contribution Rate</u>					
Normal Cost Percentage	34.02%	32.36%	30.79%	29.32%	27.93%
UAAL Amortization Percentage	11.39%	9.61%	7.82%	6.03%	4.24%
Expected Employee Contribution Percentage	<u>5.99%</u>	<u>5.99%</u>	<u>5.99%</u>	<u>5.99%</u>	<u>5.99%</u>
Actuarially Determined Contribution Rate	39.42%	35.98%	32.62%	29.36%	26.18%

SECTION II - FUNDING

K. Interest Rate Sensitivity (Continued)

	0.25% Increase: (7.00%)	0.50% Increase: (7.25%)	0.75% Increase: (7.50%)	1.00% Increase: (7.75%)	1.25% Increase: (8.00%)
<u>Funded Status</u>					
Actuarial Accrued Liability	\$ 456,716,211	\$ 445,006,424	\$ 433,787,571	\$ 423,033,570	\$ 412,719,965
Actuarial Value of Assets	<u>447,514,305</u>	<u>447,514,305</u>	<u>447,514,305</u>	<u>447,514,305</u>	<u>447,514,305</u>
Unfunded Actuarial Accrued Liability	\$ 9,201,906	\$ (2,507,881)	\$ (13,726,734)	\$ (24,480,735)	\$ (34,794,340)
Funded Ratio	98.0%	100.6%	103.2%	105.8%	108.4%
<u>Actuarially Determined Contribution Rate</u>					
Normal Cost Percentage	26.63%	25.40%	24.23%	23.14%	22.11%
UAAL Amortization Percentage	2.43%	(0.39%)	(2.18%)	(3.97%)	(5.76%)
Expected Employee Contribution Percentage	<u>5.99%</u>	<u>5.99%</u>	<u>5.99%</u>	<u>5.99%</u>	<u>5.99%</u>
Actuarially Determined Contribution Rate	23.07%	19.02%	16.06%	13.18%	10.36%

SECTION III - ACCOUNTING

ACCOUNTING

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SECTION III - ACCOUNTING

PLAN FINANCIAL STATEMENTS UNDER GASB #67

A. Statement of Fiduciary Net Position under GASB #67 as of June 30, 2015

1. Assets		
a. Cash	\$	9,468
b. Receivables		
i. Contributions Receivable	\$	95
ii. Miscellaneous Receivables		108,927
iii. Investments Receivable		6,884,868
iv. Foreign Exchange Contract Receivable		100,664,004
v. Interest and Dividends		1,124,429
vi. Due From Other Funds		-
vii. Total Receivables	\$	108,782,323
c. Total Investments		
i. Short-Term Investments	\$	-
ii. Pooled Short-Term Investments		20,291,976
iii. Pooled Fixed Income		149,929,470
iv. Pooled Equity		96,907,149
v. Pooled Alternative Investments		170,832,877
vi. Pooled Derivatives		16,533
vii. Securities Lending Collateral		21,917,103
viii. Total Investments	\$	459,895,108
d. Net Capital Assets		7,592
e. Prepaid Expenses		-
f. Total Assets: (1)(a) + (1)(b)(vii) + (1)(c)(viii) + (1)(d) + (1)(e)	\$	568,694,491
2. Liabilities		
a. Accounts Payable	\$	36,558
b. Retirement Benefits Payable		-
c. Salaries and Benefits Payable		-
d. Investments Payable		4,986,493
e. Foreign Exchange Contracts Payable		101,060,217
f. Securities Lending Obligations		21,917,103
g. Securities Sold Under Agreement to Repurchase		3,331,702
h. Due To Other Funds		9,920
i. Total Liabilities: (2)(a) + (2)(b) + (2)(c) + (2)(d) + (2)(e) + (2)(f) + (2)(g) + (2)(h)	\$	131,341,993
3. Fiduciary Net Position Restricted for Pensions: (1)(f) - (2)(i)	\$	437,352,498

SECTION III - ACCOUNTING

PLAN FINANCIAL STATEMENTS UNDER GASB #67

B. Statement of Changes in Fiduciary Net Position under GASB #67 for the Year Ended June 30, 2015

1. Fiduciary Net Position as of June 30, 2014	\$	432,729,729
2. Additions		
a. Contributions		
i. Member Contributions	\$	3,292,222
ii. Employer Contributions		21,020,000
iii. Employer Service Purchases		-
iv. Non-Employer Contributing Entity Contributions		-
v. Total Contributions	\$	24,312,222
b. Investment Income/(Loss)		
i. Net Appreciation/(Depreciation) ^{1, 2}	\$	(2,881,652)
ii. Net Interest and Dividend Income		5,831,090
iii. Securities Lending Income		73,686
iv. Other Net Investment Income		50,043
v. Investment Expenses		(3,163,202)
vi. Securities Lending Expenses		(11,896)
vii. Total Investment Income/(Loss)	\$	(101,931)
c. Other Additions		
i. Member Reassignments	\$	-
ii. Miscellaneous Receipts		8,525
iii. Total Other Additions	\$	8,525
d. Total Revenue (Additions): (2)(a)(v) + (2)(b)(vii) + (2)(c)(iii)	\$	24,218,816
3. Deductions		
a. Pension and Disability Benefits	\$	19,421,048
b. Death, Survivor, and Funeral Benefits		-
c. Distributions of Contributions and Interest		10,774
d. Member Reassignments		-
e. Administrative and Project Expenses		164,225
f. Total Expenses (Deductions): (3)(a) + (3)(b) + (3)(c) + (3)(d) + (3)(e)	\$	19,596,047
4. Net Increase (Decrease) in Fiduciary Net Position: (2)(d) - (3)(f)	\$	4,622,769
5. Fiduciary Net Position as of June 30, 2015: (1) + (4)	\$	437,352,498

¹ The calculation of realized gains and losses is independent of the calculation of the net change in the fair value of pension plan investments.

² Realized gains and losses on investments that had been held in more than one reporting period and sold in the current period were included as a change in the fair value reported in the prior period(s) and the current period.

SECTION III - ACCOUNTING

EMPLOYER FINANCIAL STATEMENTS UNDER GASB #68

C. Net Pension Liability under GASB #68 for the Year Ended June 30, 2015

1.	Total Pension Liability		
	a. Total Pension Liability - Beginning of year	\$	464,854,573
	b. Service cost ¹		15,283,088
	c. Interest cost ²		31,753,468
	d. Experience (gains)/losses		8,410,750
	e. Assumption changes		(31,925,306)
	f. Plan amendments		-
	g. Benefit payments ³		(19,431,822)
	h. Member reassignments ⁴		-
	i. Total Pension Liability - End of year	\$	468,944,751
2.	Plan Fiduciary Net Position		
	a. Plan Fiduciary Net Position - Beginning of year	\$	432,729,729
	b. Employer contributions		21,020,000
	c. Member contributions		3,292,222
	d. Non-employer contributing entity contributions		-
	e. Investment return		
	i. Expected investment return ⁵	\$	32,543,526
	ii. Investment gain/(loss)		(29,461,834)
	iii. Total investment return	\$	3,081,692
	iv. Investment Expenses		(3,175,098)
	v. Net investment return		(93,406)
	f. Benefit payments ³		(19,431,822)
	g. Member reassignments ⁴		-
	h. Administrative and Project Expenses		(164,225)
	i. Plan Fiduciary Net Position - End of year	\$	437,352,498
3.	Net Pension Liability		
	a. Net Pension Liability: (1)(i) - (2)(i)	\$	31,592,253
	b. Plan Fiduciary Net Position as a Percentage of the Total Pension Liability : (2)(i) / (1)(i)		93.3%

¹ As of the beginning of the year.

² Includes interest of 6.75% on the beginning-of-year service cost.

³ Includes refunds of accumulated member contributions.

⁴ Includes net interfund transfers.

⁵ 6.75%, net of investment expenses and assuming cash flows occur at mid-year.

SECTION III - ACCOUNTING

EMPLOYER FINANCIAL STATEMENTS UNDER GASB #68

D. Deferred Inflows and Outflows of Resources under GASB #68 for the Year Ended June 30, 2015 ¹

Fiscal Year Established	Reason	Remaining Balance At Beginning of Year	Remaining Period ²	Annual Recognition	Remaining Balance At End of Year
1. Liability experience					
a. Inflows					
2014	Experience gain	\$ 10,537,527	1.92	\$ 5,488,295	\$ 5,049,232
b. Outflows					
2015	Experience loss	\$ (8,410,750)	3.38	\$ (2,488,388)	\$ (5,922,362)
2. Assumption changes					
a. Inflows					
2015	Assumption change gain	\$ 31,925,306	3.38	\$ 9,445,357	\$ 22,479,949
b. Outflows					
None					
3. Investment experience ³					
a. Inflows					
2014	Investment gain	\$ 18,658,906	4.00	\$ 4,664,726	\$ 13,994,180
b. Outflows					
2015	Investment loss	\$ (32,636,932)	5.00	\$ (6,527,387)	\$ (26,109,545)
4. Total deferred inflows / outflows: (1) + (2) + (3)					
a. Inflows					
	Total	\$ 61,121,739		\$ 19,598,378	\$ 41,523,361
b. Outflows					
	Total	\$ (41,047,682)		\$ (9,015,775)	\$ (32,031,907)

¹ The effort and cost to re-create financial statement information for 10 years was not practical. Information was prepared prospectively from June 30, 2013 for GASB #68 purposes.

² The initial amortization period for liability experience gains / losses and assumption change gains / losses is equal to the expected future working lifetime of all members, active and inactive. The initial amortization period for investment gains / losses is five years.

³ Net of investment expenses.

SECTION III - ACCOUNTING

EMPLOYER FINANCIAL STATEMENTS UNDER GASB #68

D. Deferred Inflows and Outflows of Resources under GASB #68 for the Year Ended June 30, 2015 (Continued) ¹

Amounts reported as deferred inflows / outflows of resources to be recognized in pension expense:

Year Ending June 30:

2015	\$	10,582,603
2016	\$	10,143,540
2017	\$	5,094,308
2018	\$	780,990
2019	\$	(6,527,384)
2020	\$	-
Thereafter	\$	-

¹ The effort and cost to re-create financial statement information for 10 years was not practical. Information was prepared prospectively from June 30, 2013 for GASB #68 purposes.

SECTION III - ACCOUNTING

EMPLOYER FINANCIAL STATEMENTS UNDER GASB #68

E. Pension Expense under GASB #68 for the Year Ended June 30, 2015

1. Service cost		
a. Total service cost ¹	\$	15,283,088
b. Member contributions		(3,292,222)
c. Administrative and Project Expenses		<u>164,225</u>
d. Net employer service cost: (1)(a) + (1)(b) + (1)(c)		12,155,091
2. Interest cost ²		31,753,468
3. Expected return on assets ³		(32,543,526)
4. Plan amendments		-
5. Recognition of deferred (inflows) / outflows of resources related to:		
a. Liability experience (gains) / losses		(2,999,907)
b. Assumption changes (gains) / losses		(9,445,357)
c. Investment (gains) / losses		<u>1,862,661</u>
d. Total: (5)(a) + (5)(b) + (5)(c)		(10,582,603)
6. Preliminary pension expense: (1)(d) + (2) + (3) + (4) + (5)(d)	\$	782,430
7. Employer Service Purchases		-
8. Total Pension Expense: (6) + (7)	\$	782,430

¹ As of the beginning of the year.

² Includes interest of 6.75% on the beginning-of-year service cost.

³ 6.75% net of investment expenses and assuming cash flows occur at mid-year. Includes a half year of interest on employee contributions and administrative expenses.

SECTION III - ACCOUNTING

NOTES TO THE FINANCIAL STATEMENTS UNDER GASB #67 AND #68

F. Selected Notes to the Financial Statements under GASB #67 and #68

1 JRS is a single-employer plan for GASB accounting purposes.

2. Significant actuarial assumptions and other inputs used to measure the total pension liability:

- Measurement Date	June 30, 2015		
- Valuation Date			
Assets:	June 30, 2015		
Liabilities	June 30, 2014 - Member census data as of June 30, 2014 was used in the valuation and adjusted, where appropriate, to reflect changes between June 30, 2014 and June 30, 2015. Standard actuarial roll forward techniques were then used to project the total pension liability computed as of June 30, 2014 to the June 30, 2015 measurement date.		
- Inflation	2.25%		
- Future Salary Increases	2.50%		
- Cost-of-Living Increases	2.50%		
- Mortality Assumption	RP-2014 (with MP-2014 improvement removed) White Collar mortality tables, with future mortality improvement projected generationally using future mortality improvement inherent in the Social Security Administration's 2014 Trustee report.		
- Experience Study	The most recent comprehensive experience study was completed in April 2015 and was based on member experience between June 30, 2010 and June 30, 2014. The demographic assumptions were updated as needed for the June 30, 2015 actuarial valuation based on the results of the study.		
- Discount Rate	The discount rate used to measure the total pension liability was 6.75% as of June, 30, 2015, and is equal to the long-term expected return on plan investments. The projection of cash flows used to determine the discount rate assumed that employer contributions would be made at the actuarially calculated amount computed in accordance with the current funding policy adopted by the Board, which requires payment of the normal cost and amortization of the unfunded actuarially accrued liability in level dollar installments over 30 years utilizing a closed period approach. Since the current funding policy was adopted, the state's contributions have been consistent with the amounts required by the Board utilizing this policy. Based on this assumption, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members.		
- Discount Rate Sensitivity	1% Decrease (5.75%)	Current Rate (6.75%)	1% Increase (7.75%)
Net Pension Liability	\$ 86,319,265	\$ 31,592,253	\$ (14,318,928)

SECTION III - ACCOUNTING

NOTES TO THE FINANCIAL STATEMENTS UNDER GASB #67 AND #68

F. Selected Notes to the Financial Statements under GASB #67 and #68 (Continued)

3. Classes of plan members covered: ¹	
- Retired members, beneficiaries and disabled members receiving benefits:	326
- Terminated vested plan members entitled to but not yet receiving benefits:	78
- Terminated non-vested plan members entitled to a distribution of contributions:	32
- Active Plan Members:	368
- Total membership:	<u>804</u>
4. Money-weighted rate of return:	
The money-weighted rate of return equals investment performance, net of pension plan investment expense, adjusted for the changing amounts actually invested. For the fiscal year ending June 30, 2015, the money-weighted return on the plan assets is (0.1%).	
5. The components of the Net Pension Liability for the JRS plan as of June 30, 2015, are as follows:	
- Total Pension Liability	\$ 468,944,751
- Plan Fiduciary Net Position	<u>437,352,498</u>
- Net Pension Liability	\$ 31,592,253
- Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	93.3%

¹ The valuation results as of June 30, 2015 were calculated using June 30, 2014 census data, adjusted for certain activity during fiscal year 2015.

SECTION III - ACCOUNTING

REQUIRED SUPPLEMENTARY INFORMATION UNDER GASB #67 AND #68

G. Schedule of Changes in the Net Pension Liability and Plan Fiduciary Net Position under GASB #67 and #68 ¹

Year Ending June 30:	<u>2013</u>	<u>2014</u>	<u>2015</u>
1. Total Pension Liability			
a. Total Pension Liability - Beginning of year	\$ 437,854,459	\$ 453,109,893	\$ 464,854,573
b. Service cost ²	16,084,589	15,301,638	15,283,088
c. Interest cost ³	30,047,576	30,992,602	31,753,468
d. Experience (gains)/losses	(13,602,915)	(16,025,822)	8,410,750
e. Assumption changes	185,587	-	(31,925,306)
f. Plan amendments	-	-	-
g. Benefit payments ⁴	(17,579,537)	(18,527,788)	(19,431,822)
h. Member reassignments ⁵	120,134	4,050	-
i. Total Pension Liability - End of year	<u>\$ 453,109,893</u>	<u>\$ 464,854,573</u>	<u>\$ 468,944,751</u>
2. Plan Fiduciary Net Position			
a. Plan Fiduciary Net Position - Beginning of year	\$ 262,325,682	\$ 375,752,562	\$ 432,729,729
b. Employer contributions	111,417,613	20,894,700	21,020,000
c. Employee contributions	2,631,374	2,855,956	3,292,222
d. Non-employer contributing entity contributions	-	-	-
e. Net investment return	16,963,156	51,896,235	(93,406)
f. Benefit payments ⁴	(17,579,537)	(18,527,788)	(19,431,822)
g. Member reassignments ⁵	120,134	4,050	-
h. Administrative and Project Expenses	(125,860)	(145,986)	(164,225)
i. Plan Fiduciary Net Position - End of year	<u>\$ 375,752,562</u>	<u>\$ 432,729,729</u>	<u>\$ 437,352,498</u>

¹ The effort and cost to re-create financial statement information for 10 years was not practical. Information was prepared prospectively from June 30, 2012 for GASB #67 purposes and prospectively from June 30, 2013 for GASB #68 purposes.

² As of the beginning of the year.

³ Includes interest of 6.75% on the beginning-of-year service cost.

⁴ Includes refunds of accumulated member contributions.

⁵ Includes net interfund transfers.

SECTION III - ACCOUNTING

REQUIRED SUPPLEMENTARY INFORMATION UNDER GASB #67 AND #68

H. Schedule of Net Pension Liability and Related Ratios under GASB #67 and #68¹

1. Year Ending	2. Total Pension Liability	3. Plan Fiduciary Net Position	4. Net Pension Liability (2) - (3)	5. Fiduciary Net Position as a Percentage of Total Pension Liability (3) / (2)	6. Actual Covered Employee Payroll ²	7. Net Pension Liability as a Percentage of Covered Payroll (4) / (6)
6/30/2013	\$ 453,109,893	\$ 375,752,562	\$ 77,357,331	82.9%	\$ 47,594,849	162.5%
6/30/2014	\$ 464,854,573	\$ 432,729,729	\$ 32,124,844	93.1%	\$ 46,041,085	69.8%
6/30/2015	\$ 468,944,751	\$ 437,352,498	\$ 31,592,253	93.3%	\$ 48,582,165	65.0%

¹ The effort and cost to re-create financial statement information for 10 years was not practical. Information was prepared prospectively from June 30, 2012 for GASB #67 purposes and prospectively from June 30, 2013 for GASB #68 purposes.

² Pensionable pay as provided by INPRS. Gross member compensation, which may include components of compensation that are not included in pensionable pay, was not made available to PwC.

SECTION III - ACCOUNTING

REQUIRED SUPPLEMENTARY INFORMATION UNDER GASB #67 AND #68

I. Schedule of Contributions under GASB #67 and #68¹

1. Year Ending	2. Actuarially Determined Contribution ²	3. Actual Employer Contributions ³	4. Contribution Excess / (Deficiency) (Deficiency) <u>(3) - (2)</u>	5. Actual Covered Employee Payroll ⁴	6. Contributions as a Percentage of Covered Payroll <u>(3) / (5)</u>
6/30/2013	\$ 25,458,485	\$ 111,417,613 ⁵	\$ 85,959,128	\$ 47,594,849	234.1%
6/30/2014	\$ 27,647,672	\$ 20,894,700	\$ (6,752,972)	\$ 46,041,085	45.4%
6/30/2015	\$ 18,864,455	\$ 21,020,000	\$ 2,155,545	\$ 48,582,165	43.3%

¹ The effort and cost to re-create financial statement information for 10 years was not practical. Information was prepared prospectively from June 30, 2012 for GASB #67 purposes and prospectively from June 30, 2013 for GASB #68 purposes.

² The actuarially determined contribution amounts are based on the actuarially determined contribution rates developed in the actuarial valuation completed one year prior to the beginning of the fiscal year, multiplied by actual payroll during the fiscal year.

³ Excludes employer service purchases.

⁴ Pensionable pay as provided by INPRS. Gross member compensation, which may include components of compensation that are not included in pensionable pay, was not made available to PwC.

⁵ Includes a contribution of \$90,187,160 made to the Plan pursuant to 2012 HB 1376.

SECTION III - ACCOUNTING

REQUIRED SUPPLEMENTARY INFORMATION UNDER GASB #67 AND #68

J. Schedule of Money-Weighted Returns under GASB #67 and #68¹

1.	2.
<u>Year Ending</u>	<u>Money-Weighted Rate of Return</u>
6/30/2013	5.2%
6/30/2014	13.7%
6/30/2015	(0.1%)

¹ The effort and cost to re-create financial statement information for 10 years was not practical. Information was prepared prospectively from June 30, 2012 for GASB #67 purposes and prospectively from June 30, 2013 for GASB #68 purposes.

SECTION IV - CENSUS DATA

CENSUS DATA

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SECTION IV - CENSUS DATA

A. Reconciliation of Participant Data¹

	Actives	Inactive Non-Vested With Member Contribution Balance	Inactive Vested	Disabled	Retired	Beneficiary	Total
Total as of June 30, 2013	365	32	67	2	221	98	785
Data Adjustments for Activity During Fiscal Year 2014	-	-	-	-	-	-	-
Adjusted Total as of June 30, 2013	365	32	67	2	221	98	785
New Entrants	22	-	-	-	-	-	22
Rehires	-	-	-	-	-	-	-
Non-Vested Terminations	(1)	1	-	-	-	-	-
Vested Terminations	(17)	-	17	-	-	-	-
Retirements	-	-	(4)	-	4	-	-
Disablements	(1)	-	-	1	-	-	-
Death with Beneficiary	-	-	(2)	-	(4)	6	-
Death without Beneficiary	-	-	-	-	(1)	(3)	(4)
Refunds	-	-	-	-	-	-	-
Data Adjustments	-	(1)	-	-	1	1	1
Total as of June 30, 2014	368	32	78	3	221	102	804
Data Adjustments for Activity During Fiscal Year 2015	-	-	-	-	-	-	-
Adjusted Total as of June 30, 2014	368	32	78	3	221	102	804

¹ The valuation results as of June 30, 2015 were calculated using June 30, 2014 census data, adjusted for certain activity during fiscal year 2015.

SECTION IV - CENSUS DATA

B. Census Information as of June 30, 2014¹

	<u>Male</u>	<u>Female</u>	<u>Total</u>
1. Active			
a. Number	261	107	368
b. Average Age	55.3	53.1	54.7
c. Average Years of Service	9.2	7.9	8.8
d. Anticipated Payroll of Actives ²	\$ 35,585,385	\$ 14,065,588	\$ 49,650,973
2. Inactive - Vested			
a. Number	62	16	78
b. Average Age	63.5	58.1	62.4
c. Average Years of Service	20.2	16.1	19.4
3. Inactive - Non-Vested ³			
a. Number	26	6	32
4. Retiree/Beneficiary/Disabled			
a. Number	198	128	326
b. Average Age	73.6	78.8	75.7
c. Annual Benefits Payable ⁴	\$ 14,097,767	\$ 4,480,004	\$ 18,577,771

¹ The valuation results as of June 30, 2015 were calculated using June 30, 2014 census data, adjusted for certain activity during fiscal year 2015.

² Figures shown are the anticipated pay for the one-year period following the valuation date.

³ As of June 30, 2014, inactive non-vested members entitled to a refund of their member contributions had balances totaling \$600,741.

⁴ Figures shown reflect the 0% cost-of-living increase effective July 1, 2014, but do not reflect the 2.2% cost-of-living increase effective July 1, 2015.

SECTION IV - CENSUS DATA

C. Schedule of Active Member Valuation Data ^{1,2}

1. Valuation Date	2. Active Members	3. Anticipated Payroll (\$ in Thousands) ³	4. Average Pay ³ (3) / (2)	5. Annual Percent Increase
6/30/2006	274	\$ 34,065	\$ 124,323	8.8%
6/30/2007	258	29,712	115,164	(7.4%)
6/30/2008	267	33,729	126,327	9.7%
6/30/2009	288	36,196	125,680	(0.5%)
6/30/2010	291	36,722	126,192	0.4%
6/30/2011	363	45,764	126,072	(0.1%)
6/30/2012	361	45,138	125,037	(0.8%)
6/30/2013	365	46,967	128,676	2.9%
6/30/2014	365	47,883	131,186	2.0%
6/30/2015	368	49,651	134,921	2.8%

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary.

² The valuation results beginning as of June 30, 2014 were calculated using census data as of the prior year end, adjusted for certain activity during the current fiscal year.

³ Figures shown are the anticipated pay for the one-year period following the valuation date.

SECTION IV - CENSUS DATA

D. Schedule of Retirees, Beneficiaries, and Disabled Members ^{1,2}

1.	2. Added		3. Annual Allowances		4. Removed		5. Annual Allowances		6. End of Year ³		7.	8.	9.
Valuation Date	Number	(\$ in Thousands) ⁴	Number	(\$ in Thousands) ⁴	Number	(\$ in Thousands) ⁴	Number	(\$ in Thousands) ⁴	% Change in Annual Allowances ⁴	Average Annual Allowances ⁴			
6/30/2006	12	\$ 868	7	\$ 474	269	\$ 12,983			5.8%	\$ 48,266			
6/30/2007	18	976	8	409	279	13,899			7.1%	49,819			
6/30/2008	23	1,257	26	991	276	14,754			6.1%	53,455			
6/30/2009	74	3,744	57	1,835	293	15,230			3.2%	51,978			
6/30/2010	11	627	6	339	298	15,390			1.1%	51,644			
6/30/2011	21	1,452	9	200	310	16,787			9.1%	54,152			
6/30/2012	7	444	6	194	311	17,028			1.4%	54,751			
6/30/2013	24	1,798	14	442	321	18,474			8.5%	57,551			
6/30/2014	-	-	-	-	321	18,474			0.0%	57,551			
6/30/2015 ⁴	10	494	5	195	326	18,578			0.6%	56,987			

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary.

² The valuation results beginning as of June 30, 2014 were calculated using census data as of the prior year end, adjusted for certain activity during the current fiscal year.

³ End of year annual allowances are not equal to the prior end of year annual allowances plus addition and less removals because of reductions for beneficiary benefits, data changes, and cost-of-living increases.

⁴ Annual allowances reflect cost-of-living increases effective July 1 following the date of the census data.

SECTION IV - CENSUS DATA

E. Distribution of Active Members by Age and Service ¹

Attained	Distribution of Active Members by Age and Service as of June 30, 2014 ¹								
Age	Under 10 years	10 to 14 years	15 to 19 years	20 to 24 years	25 to 29 years	30 to 34 years	35 to 39 years	Over 40 years	Total
<25									
25-29									
30-34	4								4
35-39	14								14
40-44	31	3							34
45-49	49	8	1						58
50-54	35	13	5						53
55-59	45	17	21	4					87
60-64	32	17	12	5					66
65-69	16	10	17	1					44
70&Up	1	4	2	1					8
Total	227	72	58	11					368

¹ The valuation results as of June 30, 2015 were calculated using June 30, 2014 census data, adjusted for certain activity during the fiscal year 2015.

SECTION IV - CENSUS DATA

F. Distribution of Inactive Vested Members by Age and Service¹

Attained	Distribution of Inactive Vested Members by Age and Service as of June 30, 2014 ¹						
Age	Under 10 years	10 to 14 years	15 to 19 years	20 to 24 years	25 to 29 years	Over 30 years	Total
<25							
25-29							
30-34							
35-39							
40-44							
45-49		1					1
50-54	1	3	1	1			6
55-59	1	6	1	10			18
60-64	1	3	3	15			22
65-69	1		1	22			24
70&Up				7			7
Total	4	13	6	55			78

¹ The valuation results as of June 30, 2015 were calculated using June 30, 2014 census data, adjusted for certain activity during the fiscal year 2015.

SECTION IV - CENSUS DATA

G. Distribution of Retired Members, Beneficiaries, and Disabled Members by Age and Number of Years Retired ¹

Attained Age	Distribution of Retired Members, Beneficiaries, and Disabled Members by Age and Number of Years Retired as of June 30, 2014 ¹						
	Under 10 years	10 to 14 years	15 to 19 years	20 to 24 years	25 to 29 years	Over 30 years	Total
<40							
40-44							
45-49	1						1
50-54							
55-59	3		1				4
60-64	17					1	18
65-69	69	6	1	1		1	78
70-74	42	20	2		2	1	67
75-79	13	21	20	1	4	1	60
80-84	3	7	23	8	7	4	52
85-89	2	2	3	7	6	5	25
90&Up				5	5	11	21
Total	150	56	50	22	24	24	326

¹ The valuation results as of June 30, 2015 were calculated using June 30, 2014 census data, adjusted for certain activity during the fiscal year 2015.

SECTION IV - CENSUS DATA

H. Schedule of Benefit Recipients by Type of Benefit Option¹

1977 System						
Number of Benefit Recipients by Benefit Option as of June 30, 2014						
Amount of Monthly Benefit	Retiree Single Life Annuity	Retiree 50% Joint and Survivor Annuity	Survivors	Disabled	Total	
\$ 1 - 500	0	0	0	0	0	
501 - 1,000	0	0	0	0	0	
1,001 - 1,500	0	0	32	0	32	
1,501 - 2,000	0	0	12	0	12	
2,001 - 3,000	2	7	29	0	38	
over 3,000	16	124	19	0	159	
Total	18	131	92	0	241	

1985 System						
Number of Benefit Recipients by Benefit Option as of June 30, 2014						
Amount of Monthly Benefit	Retiree Single Life Annuity	Retiree 50% Joint and Survivor Annuity	Survivors	Disabled	Total	
\$ 1 - 500	0	0	0	0	0	
501 - 1,000	0	0	0	0	0	
1,001 - 1,500	0	0	2	0	2	
1,501 - 2,000	0	0	1	0	1	
2,001 - 3,000	0	2	5	0	7	
over 3,000	6	64	2	3	75	
Total	6	66	10	3	85	

¹ The valuation results as of June 30, 2015 were calculated using June 30, 2014 census data, adjusted for certain activity during fiscal year 2015. Monthly benefits reflect the 0% cost-of-living increase effective July 1, 2014, but do not reflect the 2.2% cost-of-living increase effective July 1, 2015.

SECTION IV - CENSUS DATA

I. Schedule of Average Benefit Payments as of June 30, 2014^{1,2}

1977 Plan									
	Years of Credited Service							Total	
	0-4	5-9	10-14	15-19	20-24	25-29	30+		
Average Monthly Defined Benefit ³	\$ 1,693	\$ 2,381	\$ 3,805	\$ 4,920	\$ 5,244	\$ 6,537	\$ 6,694	\$ 4,571	
Average Final Average Salary	\$ 25,889	\$ 110,005	\$ 117,268	\$ 110,217	\$ 111,005	\$ 111,414	\$ 122,579	\$ 112,208	
Number of Benefit Recipients	34	17	42	34	56	34	24	241	

1985 Plan									
	Years of Credited Service							Total	
	0-4	5-9	10-14	15-19	20-24	25-29	30+		
Average Monthly Defined Benefit ³	\$ 4,329	\$ 2,476	\$ 4,578	\$ 5,771	\$ 6,490	\$ 6,706	\$ 4,923	\$ 5,253	
Average Final Average Salary	\$ 100,518	\$ 106,483	\$ 114,417	\$ 126,342	\$ 129,964	\$ 118,952	\$ 125,647	\$ 120,976	
Number of Benefit Recipients	2	4	33	27	13	4	2	85	

¹ The valuation results as of June 30, 2015 were calculated using June 30, 2014 census data, adjusted for certain activity during fiscal year 2015.

² For some members average salary at retirement and years of credited service was not available. The average salary for each group excludes these members. Members with credited service information that is missing are counted in the "0-4" group.

³ Figures shown reflect the 0% cost-of-living increase effective July 1, 2014, but do not reflect the 2.2% cost-of-living increase effective July 1, 2015.

SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS

ACTUARIAL ASSUMPTIONS AND METHODS

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SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions

The assumptions used in the valuation were selected and approved by the INPRS Board of Trustees. The demographic assumptions are reviewed at least every five years through a study of actual experience. The last study was completed in April 2015. In this way, the actuary provides guidance to the Board in selecting the assumptions. The actuary and other economic and investment professionals also provide advice to the Board for selecting the economic assumptions. In our opinion, the assumptions are reasonable for purposes of this valuation.

Interest Rate / Investment Return

Funding: 6.75% (net of administrative and investment expenses)
Accounting: 6.75% (net of investment expenses)

Interest on Member Balances 3.5% per year

Future Salary Increases 2.5% per year beginning July 1, 2016. Actual salary increases of 0.0% on July 1, 2014 and 2.2% on July 1, 2015 are reflected in the liability valuation at June 30, 2015.

Inflation 2.25% per year

Cost of Living Increases 2.5% per year in deferral and retirement beginning July 1, 2016. Actual cost-of-living increase of 0.0% on July 1, 2014 and 2.2% on July 1, 2015 are reflected in the liability valuation at June 30, 2015.

Mortality (Healthy and Disabled) RP-2014 (with MP-2014 improvement removed) White Collar mortality tables, with future mortality improvement projected generationally using future mortality improvement inherent in the Social Security Administration's 2014 Trustee report.

Disability 1964 OASDI Table. Illustrative rates shown below:

<u>Age</u>	<u>Rate</u>
20	0.060%
25	0.085%
30	0.110%
35	0.147%
40	0.220%
45	0.360%
50	0.606%
55	1.009%
60	1.627%
65+	0.000%

SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions (Continued)

Termination 3% per year for all members prior to retirement eligibility.

Retirement Based on 2010-2014 experience. Rates shown below:

<u>Age</u>	<u>Service < 22</u>	<u>Service >= 22</u>
55-61	N/A	70%
62	25%	70%
63	15%	70%
64	10%	70%
65	50%	70%
66-74	30%	70%
75+	100%	100%

Decrement Timing Decrements are assumed to occur at the beginning of the year.

Spouse/Beneficiary 90% of members are assumed to be married or to have a dependent beneficiary. Male members are assumed to be three (3) years older than their spouses and female members are assumed to be two (2) years younger than their spouses.

Data Assumptions Actives and inactives with no date of birth and/or no gender are assumed to be age 57 and/or male. Spouse gender is assumed to be the opposite gender of the member.

Retirees and disabled members with an unknown marital status are assumed to be married. Retirees and disabled members that are not married are assumed to be receiving a single life annuity. Retirees and disabled members that are married are assumed to be receiving a 50% joint and survivor annuity.

SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions (Continued)

Changes in Assumptions

An assumption study was performed in April 2015 resulting in an update to the following assumptions:

The inflation assumption decreased from 3.00% to 2.25% per year.

The future salary increase assumption decreased from 4.00% to 2.50% per year.

The cost of living increase assumption decreased from 4.00% to 2.50% per year.

The mortality assumption changed from the 2013 IRS Static Mortality projected five (5) years with Scale AA to the RP-2014 (with MP-2014 improvement removed) White Collar mortality tables, with future mortality improvement projected generationally using future mortality improvement inherent in the Social Security Administration's 2014 Trustee report.

The retirement assumption changed from an age-based table to an age and service-based table, reflecting higher rates of retirement after 22 years of service.

The termination assumption changed from an age-based table to a constant 3% per year for all members.

The dependent assumption was adjusted to reflect recent experience.

SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS

B. Actuarial Methods

The actuarial methods used in this valuation were selected and approved by the Board. In general, the methods provide orderly funding of all benefits being accrued, as well as unfunded past-service benefit liabilities, over a period of thirty years. However, the smoothing method employed in determining the Actuarial Value of Assets may accelerate or lengthen the effective funding period, depending on whether gains or losses are experienced. In our opinion, the actuarial methods are reasonable for the purposes of this valuation.

1. Actuarial Cost Method

The actuarial cost method is Entry Age Normal - Level Percent of Payroll.

The normal cost is calculated separately for each active member and is equal to the level percentage of payroll needed as an annual contribution from entry age to retirement age to fund projected benefits. The actuarial accrued liability on any valuation date is the accumulated value of such normal costs from entry age to the valuation date.

For funding, gains and losses occurring from census experience different than assumed, assumption changes, and benefit changes are amortized over a 30-year period with level payments each year. A new gain or loss base is established each year based on the additional gain or loss during that year and that base is amortized over a new 30-year period. However, when the plan is at or above 100% funded (based on Actuarial Value of Assets), the past amortization bases are considered fully amortized and a single amortization base equal to the surplus is amortized over a 30-year period with level payments each year. The purpose of the method is to give a smooth progression of the costs from year to year and, at the same time, provide for an orderly funding of the unfunded liabilities.

For accounting, gains and losses occurring from census experience different than assumed and assumption changes are amortized into expense over the average expected future service of all plan participants (actives and inactive). Gains and losses occurring from investment experience different than assumed are amortized into expense over a 5-year period. The effect of plan changes on the plan liability are fully recognized in expense in the year in which they occur.

Member census data as of June 30, 2014 was used in the valuation and adjusted, where appropriate, to reflect changes between June 30, 2014 and June 30, 2015. Standard actuarial roll forward techniques were then used to project the liabilities computed as of June 30, 2014 to the June 30, 2015 measurement date.

2. Asset Valuation Method

The Actuarial Value of Assets smoothes the recognition of gains and losses on the Market Value of Assets over four years, subject to a 20% corridor.

SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS

B. Actuarial Methods (Continued)

3. State Appropriations

Based on the assumptions and methods previously described, an actuarially determined contribution amount is computed. The Board considers this information when requesting funds from the State.

4. Anticipated Payroll

The Anticipated Payroll of \$49,650,973 for the fiscal year beginning July 1, 2015 is equal to the actual payroll during the year ending June 30, 2015, increased with one year of salary scale, but does not include amounts for members who have reached the age at which retirement is assumed to occur immediately.

5. Changes in Actuarial Methods

There were no method changes for the June 30, 2015 valuation.

SECTION VI - SUMMARY OF PLAN PROVISIONS

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Summary of Plan Provisions

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SECTION VI - SUMMARY OF PLAN PROVISIONS

Summary of Plan Provisions

The benefit provisions for the JRS are set forth in IC 33-38-6, 33-38-7, and 33-38-8. A summary of those defined pension benefit provisions is presented below:

Participation All individuals serving as a judge or justice in Indiana as defined in IC 33-38-6-7. A judge who begins service before September 1, 1985 shall be a participant of the 1977 System (IC 33-38-7) and a judge who begins service after August 31, 1985 shall be a participant of the 1985 System (IC 33-38-8).

Eligibility for Defined Pension Benefits

- a. Normal Retirement Earliest of:
 - Age 65 with 8 or more years of creditable service
 - Age 55 with sum of age and creditable service equal to 85 or more

- b. Early Retirement Age 62 with 8 or more years of creditable service

- c. Late Retirement Subject to continued employment after normal retirement

- d. Disability Retirement A participant is considered disabled if two (2) physicians certify that the participant is totally incapacitated from earning a livelihood and that the condition is likely to be permanent

- e. Termination 8 or more years of creditable service and no longer active (i.e. vested inactive)

- f. Pre-Retirement Death 8 or more years of creditable service entitled to a future benefit

SECTION VI - SUMMARY OF PLAN PROVISIONS

Summary of Plan Provisions (Continued)

Amount of Benefits

- a. Normal Retirement The normal retirement benefit is a monthly annuity payable for life with a 50% continuation (or \$12,000 annually, if greater) to a surviving spouse or surviving dependent children. The benefit is equal to a percentage of earnings¹ in accordance with the following table:

<u>Years of Service</u>	<u>Percentage</u>
7 or less	0%
8	24%
9	27%
10	30%
11	33%
12	50%
13	51%
14	52%
15	53%
16	54%
17	55%
18	56%
19	57%
20	58%
21	59%
22 or more	60%

An additional percentage shall be calculated by prorating between applicable percentages, based on the number of months in a partial year of service.

¹ Earnings is the annual salary being paid for the office which the participant held at the time of separation from service.

SECTION VI - SUMMARY OF PLAN PROVISIONS

Summary of Plan Provisions (Continued)

Amount of Benefits (continued)

- b. Early Retirement The early retirement benefit is the accrued retirement benefit determined as of the early retirement date and payable commencing at the normal retirement date. A participant may elect to have the benefit commence prior to age 65 provided the benefit is reduced by 0.1% for each month that the benefit commencement date precedes age 65.

- c. Late Retirement The late retirement benefit is calculated in the same manner as the normal retirement benefit. Creditable service and earnings earned after normal retirement is included in the computation.

- d. Disability Retirement The disability retirement benefit is payable for the duration of the disability commencing the month following disability date with reduction for early commencement. The amount of monthly benefit shall be equal to a percentage of average monthly earnings in accordance with the following table:

Years of Service	Percentage
12 or less	50%
13	51%
14	52%
15	53%
16	54%
17	55%
18	56%
19	57%
20	58%
21	59%
22 or more	60%

An additional percentage shall be calculated by prorating between applicable percentages, based on the number of months in a partial year of service.

SECTION VI - SUMMARY OF PLAN PROVISIONS

Summary of Plan Provisions (Continued)

Amount of Benefits (continued)

- e. Termination The termination benefit is the accrued retirement benefit determined as of the termination date and payable commencing as of the normal retirement date. The participant may elect to receive a reduced early retirement benefit.

- f. Death Benefit If death occurs (a) while receiving benefits, (b) while in service as a judge with 8 or more years of service, or (c) while permanently disabled, the spouse or family of dependent children shall be eligible for a benefit equal to the greater of \$12,000 (effective July 1, 1977) annually or 50% of the benefit the participant was receiving or was entitled to receive at the time of death.

Spousal benefits are payable as a lifetime monthly pension.

- g. Post-Retirement Benefit Increases Participant benefits in the Judges 1977 Retirement, Disability, and Death System increase in the same ratio as the salary being paid for the office a participant held at the time of separation from service increases. Effective January 1, 2010, the Judges 1985 Retirement, Disability, and Death System will also have benefits increase in the same manner, on a prospective basis only.

Member Contributions

Each participant contributes 6% of his total salary until completion of 22 years of service.

Forms of Payment

- a. Single Life Annuity Member will receive a monthly benefit for life, but there are no monthly payments to anyone after death.

- b. Joint with One-Half Survivor Benefits Member will be paid a monthly benefit for life. After death, one-half (1/2) of the benefit will be paid to the spouse for their lifetime or the dependent until age 18 unless disabled. If the dependent child was named the beneficiary, once they are no longer entitled to the benefit, the spouse would receive the benefit for life.

SECTION VI - SUMMARY OF PLAN PROVISIONS

Summary of Plan Provisions (Continued)

Withdrawal from Fund	If member's employment is terminated prior to eligibility for a retirement annuity, the member may withdraw their contributions from the Fund.
Cost-of-Living Adjustments	Benefits for retired members increase automatically based on the annual pay increase granted for the position the member held at the time of retirement. The annual cost-of-living assumption for the valuation is 2.5%, which is the same as the salary increase assumption for active members.
Changes in Provisions	No changes since prior valuation.

SECTION VII - DEFINITIONS OF TECHNICAL TERMS

Definitions of Technical Terms

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SECTION VII - DEFINITIONS OF TECHNICAL TERMS

Definitions of Technical Terms

Actuarial Accrued Liability (AAL)	That portion, as determined by a particular Actuarial Cost Method, of the Present Value of Future Benefits (PVFB) and expenses which is not provided for by future Normal Costs. Generally, the portion of the PVFB attributable to past service.
Actuarial Assumptions	Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; changes in compensation and Government provided pension benefits; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; characteristics of future entrants for Open Group Actuarial Cost Methods; and other relevant items.
Actuarial Cost Method	A mathematical procedure for allocating the Present Value of Future Benefits to service periods, usually in the form of a Normal Cost and an Actuarial Accrued Liability.
Actuarial Gain/(Loss)	The difference between actual Unfunded Actuarial Accrued Liability and anticipated Unfunded Actuarial Accrued Liability resulting from differences between actual and expected plan experience between two valuation dates.
Actuarial Present Value	The single amount that is equal to a payment or series of payments in the future. It is determined by discounting future payments using predetermined Actuarial Assumptions for interest and by probabilities of payment.
Actuarial Valuation	The determination, as of an Actuarial Valuation Date, of the Present Value of Future Benefits, Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values.
Actuarial Valuation Date	The date as of which an Actuarial Valuation is performed.
Actuarially Determined Contribution	The precise actuarial contribution rate (expressed as a percentage of covered payroll) or amount determined in accordance with a Funding Policy, which generally reflects the Normal Cost and amortization of any Unfunded Actuarial Accrued Liability.
Actuarially Equivalent	Having the same Actuarial Present Value, based on a set of Actuarial Assumptions.

SECTION VII - DEFINITIONS OF TECHNICAL TERMS

Definitions of Technical Terms (Continued)

Amortization	The payment of a present value financial obligation on an installment basis over a future period.
Creditable Service	Service credited under the system that was rendered before the date of the actuarial valuation.
Funding Policy	A set of principles, often including a prescribed Actuarial Cost Method, Actuarial Assumptions, and/or Unfunded Actuarial Accrued Liability Amortization Method, that guide the calculation of the Actuarially Determined Contribution and management decisions regarding funding.
Level Dollar Amortization	Amortization where the installments are equal dollar amounts during each period.
Level Percent Amortization	Amortization where the installments are an equal percent of employee payroll during each period.
Normal Cost (NC)	That portion of the Present Value of Future Benefits which is allocated to the year following the Actuarial Valuation Date by the Actuarial Cost Method. The normal cost is specific to the cost method used.
Plan Assets	Resources, usually in the form of stocks, bonds, and other classes of investments, that have been segregated and restricted in a trust, or equivalent arrangement, in which (a) employer contributions to the plan are irrevocable, (b) assets are dedicated to providing benefits to retirees and their beneficiaries, and (c) assets are legally protected from creditors of the employer(s) or plan administrator, for the payment of benefits in accordance with the terms of the plan.
Plan Members	The individuals covered by the terms of a pension plan. The plan membership generally includes employees in active service, terminated employees who have accumulated benefits but are not yet receiving them, and retired employees and beneficiaries currently receiving benefits.

SECTION VII - DEFINITIONS OF TECHNICAL TERMS

Definitions of Technical Terms (Continued)

Present Value of Future Benefits (PVFB)

Projected benefits estimated to be payable to plan members (retirees and beneficiaries, terminated employees entitled to benefits but not yet receiving them, and current active members upon retirement) as a result of their service through the valuation date and their expected future service. The actuarial present value of projected future benefits as of the valuation date is the present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment (taking into account mortality, turnover, probability of participating in plan retirement, etc.). Alternatively, it is the amount that would have to be invested on the valuation date so that the amount invested plus investment earnings will provide sufficient assets to pay the projected benefits when due.

Unfunded Actuarial Accrued Liability (UAAL)

The difference between the Actuarial Accrued Liability and Plan Assets as of a particular date. Plan assets may be market value or a smoothed value.

Unfunded Actuarial Accrued Liability Amortization Method

A predetermined process by which any Unfunded Actuarial Accrued Liability will be amortized for calculating the Actuarially Determined Contribution.